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EXAMINER	
BUCKLEY, AUDREA	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/577,910	BALAKRISHNAN ET AL.	
	Examiner	Art Unit	
	AUDREA J. BUCKLEY	1611	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *14 October 2009*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-48* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-48* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Status of the Claims

Acknowledgement is made of Applicants' amendments to the claims and remarks filed 10/14/2009.

Claims 49-51 are canceled. Claims 1-48 currently are pending and under consideration in the instant Office action.

Maintained Claim Rejections

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein

were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ronning et al. (US 4,683,132) in view of Martens, et al. (GB 2,039,740).

Claim 1 is drawn to a packaging means for retaining and releasing at least one vapor active pyrethroid compostion where the container comprises a holder and a cellulosic substrate, among other structural and functional limitations.

Ronning et al. teach compositions, devices, and methods for the extended control of insect activity wherein an insect control agent is adhered to a fiber having a rough surface which preferably is comprised of cellulose or cellulose derivatives. Further, Ronning et al. teach this invention with regard to efficacy against insects which are defined as "crawling and/or flying pests such as wasps, hornets..., house flies, mosquitoes, cockroaches..." (column 1, line 16). Additionally, Ronning et al. teach a pyrethroid active agent as the insecticide of choice (column 12, line 51). Although Ronning et al. teach the basic concept for insect control that is instantly disclosed, some of the limitations of the instantly claimed packaging means are not expressly included.

However, Martens, et al. teach several of the features of the instantly claimed packaging means. More specifically, instant claim 1 is drawn to a packaging means comprising a holder and a substrate wherein the holder comprises a top, a base,

and a longitudinal member between the top and the base. Further, the instant invention includes this substrate which is attached to the top and the base and includes a honeycomb configuration as well as an effective amount of surface area in order to release an effective amount of the vapor active pyrethroid.

Generally, Martens, et al. teach a vapor dispensing device for dispensing air fresheners, insecticides, and other air-treating vapors. The structure of the dispensing device which Martens, et al. teach precedes that of the instant invention and teaches an upstanding enclosure having dispensing openings and "characterized in that the enclosure is formed out of flexible sheet stock and including tow upstanding opposed primary walls each defining dispensing openings and a structural carrier disposed within the enclosure to provide reinforcing dimensional stability between the primary walls, the structural carrier defining air flow channels from one of the primary walls to the other, and releasable holding the vaporizable composition" (page 1, column 2, line 109). Much more specifically, Martens, et al. disclose that "a great variety of other shapes and arrangements of materials may be used to form the structural means ....Convoluted rolls of corrugated cardboard, honeycomb configurations, cris-cross configurations...are a few examples," (page 4, column 1, line 19). Additionally, Martens et al. teach that control of vapor release is possible by increasing or decreasing the carrier structure surface area which is exposed to air (page 4, column 2, line 89).

Due to the interrelated nature of a vapor-active composition and its packaging means for delivery, one of ordinary skill in the art at the time the invention was made would have been motivated to combine features of the compositions,

devices, and methods for controlling insects as taught by Ronning, et al. with features of the vapor dispensing device as taught by Martens, et al. Furthermore, the substitution of the cellulosic substrate as the carrier structure remains obvious due to the benefits of the improved stability and longer lasting properties of the cellulose counterpart to the paperboard precedent which Martens et al. teach. In view of these prior teachings, one of ordinary skill in the art at the time of the invention would have found the combination of these known features as discussed above to have been prima facie obvious.

In regard to claim 2, which is drawn to the cellulosic substrate previously claimed and further limits this substrate to one which comprises two or more discrete parts, Martens et al. previously teach an analogous composition and packaging means which fulfill this limitation. Specifically, Martens et al. teach a carrier structure which includes one or more pieces substantially perpendicular to a reference plan midway between the two primary walls and having edges which are in contact with the primary walls. Clearly, the embodiment taught here comprises a substrate analogous to the cellulosic substrate of the instant invention as well as a general packaging means that, besides the analogous substrate difference, otherwise meets the limitations of the instantly claimed subject matter as well as the limitations of the claim on which claim 2 depends. And, finally, the embodiment which Martens et al. teaches clearly includes two or more discrete parts, any of those named above which may be chosen and isolated as a discrete part.

In regard to claim 3, Martens et al. teach a container which releasably holds the vaporizable composition (page 5, column 1, line 35).

Claim 4 limits the packaging means to one in which the two parts are of substantially identical dimensions. Likewise, Martens, et al. teach a device where a carrier structure contains inside enclosures (page 2, column 2, line 100), and, as illustrated the structure and enclosure components, taken as two representative parts of the packaging means, clearly are of substantially identical dimensions as necessary to produce the desired fit and stability of the claimed packaging means.

Due to the aforementioned known successes related to the packaging means structure, contents, and control release functions, of analogous vaporizable compositions, one of ordinary skill in the art at the time the invention was made would have been motivated to implement the features of claims 1-4, 23, and 24 into the packaging means for emanating pyrethroid active agents as disclosed in the instant invention. For this reason, one of ordinary skill in the art at the time of the invention would have found these implementations to have been prima facie obvious in view of the teachings of Ronning et al. and Martens et al..

Claims 19-21, 26-33, 39, and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ronning et al. (US 4,683,132) in view of Martens, et al. (GB 2,039,740)s applied to claims 1-4 above, and further in view of Thornton et al. (US 3,790,081).

Ronning et al. teach compositions, devices, and methods for the extended control of insect activity wherein an insect control agent is adhered to a fiber having a rough surface which preferably is comprised of cellulose or cellulose derivatives.

Generally, Martens, et al. teach a vapor dispensing device for dispensing air fresheners, insecticides, and other air-treating vapors. The structure of the dispensing device which Martens, et al. teach precedes that of the instant invention and teaches an upstanding enclosure having dispensing openings. Thornton et al. elaborate on the teachings of Ronning et al. and Martens et al. by implementing structural device details that relate to and precede those of the instant invention.

Thornton et al. teach a device for dispensing a vaporizing composition to the surrounding atmosphere characterized by a hollow tubular body with end members sealing the open ends and apertures through the end members, a porous core member impregnated with a vaporizing composition, having a multiplicity of passages defined through the core member communicating between the end members and having end surfaces displaced from the end members, and a mounting means to maintain the device.

Claims 19-21 are drawn to the releasable attachment of the longitudinal member with respect to the top, the base, and the top and base, respectively. Although neither Thornton et al. nor the instant claim underscore the benefits of this releasability feature, Thornton et al. describe a device which has a core member communicating between each end member and "having end surfaces displaced from said end members" (column 6, line 67). In the context of this disclosure, Thornton et al. clearly describe a device which is in accordance with the limitations of the instant claims.

Claim 26 is drawn to the packaging means in which the longitudinal member is a column which vertically extends between the top and the base. Likewise,

Thornton et al. claim a tubular body comprising the inner and outer device members (column 7, line 39).

Claim 27 is drawn to the packaging means in which the column can be folded at one or more hinged joints. Likewise, Thornton et al. claim components with apertures in which each end can be adjustably closed "by relative axial movement of said telescoping members," (column 8, line 4). Clearly, the content of the invention of Thornton et al. is describing a hinging capability which is the same inventive concept of the instant invention.

Likewise, claim 28 is drawn to the column component of the packaging means which is collapsible by telescopic movement of one or more parts of the column within the other parts of the column. Again, Thornton et al. claim components with apertures in which each end can be adjustably closed "by relative axial movement of said telescoping members," (column 8, line 4). Clearly, the content of the invention of Thornton et al. is describing a hinging capability in which the hinge activity takes place within the other parts of the center piece, in the same or obviously similar fashion as that described in the instant claim.

Claim 29 limits the packaging means to one in which the column is comprised of two or more interfitting parts. In the same way, Martens, et al. teach a carrier structure, which is analogous to the instantly claimed column, which is formed of "two slotted, interlocked pieces" (page 4, column 1, line 4).

Claim 30 limits the column component to one which is comprised of two or more releasable interfitting parts. Likewise, Martens, et al. teach a carrier structure, which is

analogous to the instantly claimed column, which is formed of "two slotted, interlocked pieces" (page 4, column 1, line 4).

Claim 31 limits the column component to one which is comprised of two or more non-releasable interfitting parts. Likewise, Thornton et al. teach a vapor dispensing device characterized by a hollow tubular body, which is analogous to the instantly claimed column, which has end members sealing the ends and thus limiting the releasability of the interfitting parts (column 6, line 61).

Claim 32 is drawn to a the packaging means in which the parts can be interfitted via a slotted configuration and where each part can fit into the slot of another one or more parts. Martens et al. teach the carrier structure with two slotted interlocked pieces (page 4, column 1, line 4) while the carrier structure also has edges which would engage primary walls (page 4, column 1, line 7). Clearly, Martens et al. previously had taught a device which contained interfitted parts which also fit into additional slots, as necessitated by the instant claim.

Claim 33 is drawn to a sliding adaptation capability where sliding between the column and holder is facilitated. Similarly, Thornton et al. teach "bottom edge of tubular body member blocks off apertures by means of a snug sliding fit between body and end member," (column 4, line 31). Regarding a comparison to the instantly claimed matter, the tubular body member taught by Thornton et al. is analogous to the column as instantly claimed, and the end member taught by Thornton et al. remains analogous to the holder as instantly claimed.

Where claim 39 is drawn to the containment of the substrate between the

top and the base and where the substrate receives the longitudinal member through an aperture. Likewise, Thornton et al. teaches a device with a hollow tubular body with end members sealing the open ends and apertures through the end members, a core member containing a vaporizing composition, where the device has a multiplicity of passages through the core member. Evidently, the inventive concept which Thornton et al. teach precedes that of the instant claim, thereby rendering it obvious.

Claim 44 is drawn to a rim implement to retain the vapor active pyrethroid when the top and base are in the closed state. Similarly, Thornton et al. teach a device wherein at least one of the end members is slidably sealed to said body and has apertures positioned to be adjustably closed by relative axial movement of said end member and said body (column 7, line 21). The concept which Thornton et al. claims here remains identical to that of the instant claim, therefore the concept which Thornton et al. claims precedes the instant invention, and due to the similar device functions and applications, one of ordinary skill in the art at the time of the invention would have been motivated to utilize this sealing feature in order to maintain the integrity of the device.

Although Thornton et al. teach a vapor dispensing device which is not limited to the dispensing of pyrethroid compounds or even of insecticides, one of ordinary skill in the art at the time of the invention would have been able to correlate the features of the deodorizing vapor dispensing device which Thornton et al. disclose and the features beneficial to an insecticide vapor dispensing device as disclosed in instant claims 19-21,26-33, 39, and 44. On account of this motivation, one of ordinary skill in the art at the time of the invention would have found the utilization of the known features

associated with these claims as discussed above to have been prima facie obvious in view of the prior art which teaches structural features of a vapor dispensing device as discussed above.

Claims 22-24, 37, 38, and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ronning et al. (US 4,683,132) in view of Martens, et al. (GB 2,039,740) as applied to claims 1-4 above, and further in view of Spector (US 4,523,870).

Ronning et al. teach compositions, devices, and methods for the extended control of insect activity wherein an insect control agent is adhered to a fiber having a rough surface which preferably is comprised of cellulose or cellulose derivatives. Generally, Martens, et al. teach a vapor dispensing device for dispensing air fresheners, insecticides, and other air-treating vapors. The structure of the dispensing device which Martens, et al. teach precedes that of the instant invention and teaches an upstanding enclosure having dispensing openings. Spector elaborates on the teachings of Ronning et al. and Martens et al. by implementing structural device details, such as a control feature not detailed by Ronning et al. or Martens et al..

Spector discloses an aroma dispensing cartridge and holder assembly attachable to an air vent. The assembly is constituted by a holder provided with an array of parallel slots and a replaceable cartridge which is telescoped therein. The cartridge contains a porous pad impregnanted with scent and includes a further array of slots. The inserted cartridge is axially shiftable relative to the holder from an inactive position in which the

holder and cartridge slots are out of registration to effectively seal the pad, to an active position in which the slots lie in registration, as a consequence of which the forced stream from the vent passes through the pad in order to volatilize and diffuse the liquid active agent. Due to the detailed features which Spector teaches and which Ronning et al. and Martens, et al. do not elaborate on, one of ordinary skill in the art would be motivated to combine the details which Ronning, et al. and Martens, et al. omit with the details on which Spector elaborates in order to construct an obvious improvement of the vapor dispensing device.

Regarding claim 22, which is drawn to the packaging means having a first and second position such that the top and base are in an open state in the first position or closed in the second position, a structural positioning feature which Ronning et al. and Martens, et al. did not expressly detail, Spector previously taught this inventive concept of a device implementing an open/closed feature in order to control the release of the contained composition.

Claim 23 is drawn to a packaging means in which the open state releases the active composition. Similarly, Martens, et al. teach an open condition in which the openings are aligned and product dispensing is facilitated (page 3, column 2, line 115).

Claim 24 is drawn to a packaging means in which the closed state contains the active composition. Similarly, Martens et al. teach a closed condition of the dispenser (page 3, column 2, line 112).

Due to the similar nature of dispersing an active agent through the medium of air, one of ordinary skill in the art would have been motivated to combine the

active/inactive position feature taught by Spector into the on/off feature claimed in the instant invention. For this reason, one of ordinary skill in the art would have found the implementation of the previously known "switch" feature to have been prima facie obvious in view of the teachings of Spector and Martens, et al..

Claim 37 is drawn to the combination of a holder and a substrate wherein the content of the substrate is retained in the holder until released or replaced; Claim 38 limits the holder to one comprising slots into which the substrate can be implemented. Spector teaches an aroma dispensing cartridge and holder assembly where the cartridge contains a porous pad impregnated with liquid scent and includes a further array of slots from which the pad can be replaced as desired. Further, this porous pad is analogous to the instantly claimed substrate. One of ordinary skill in the art would have recognized that pads or substrates onto which volatile or active agents were loaded were commonly comprised in a container, holder, or other housing, where a variety of container types can be used. Further, all these container types include some means by which the container may be sealed to effectively store/preserve the volatile compound until such time as opened/activated by the consumer. So, one of ordinary skill in the art would have been aware of this feature allowing the user of a packaging device to release the contents of the device at his or her will, and, consequently would have found the content of instant claims 37 and 38 to have been prima facie obvious.

Claim 40 is drawn to the removal and reattachment of the top or base in order to replace the substrate. Spector suggests that the components of the holder frame need to be partially detached from their functional position in order to replace the

dispensing cartridge. So, one of ordinary skill in the art at the time the invention was made would recognize that the detachable feature as previously taught could be used in concert with the body of the instantly disclosed invention. Consequently, one of ordinary skill in the art would have recognized this feature as one which was prima facie obvious.

Claims 25 and 34-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ronning et al. (US 4,683,132)in view of Martens, et al. (GB 2,039,740)s applied to claims 1-4 above, and further in view of Furner et al. (US 6,569,387).

Ronning et al. teach compositions, devices, and methods for the extended control of insect activity wherein an insect control agent is adhered to a fiber having a rough surface which preferably is comprised of cellulose or cellulose derivatives. Generally, Martens, et al. teach a vapor dispensing device for dispensing air fresheners, insecticides, and other air-treating vapors. The structure of the dispensing device which Martens, et al. teach precedes that of the instant invention and teaches an upstanding enclosure having dispensing openings. Furner et al. elaborate on the teachings of Ronning et al. and Martens et al. by implementing structural device details, such as features of a spray dispensing element that relate to and precede those of the instant invention.

Furner et al. teach a dual function dispenser which dispenses spray or an evaporative long term dispersible material. Additionally disclosed are refill units for these dispensers, and associated spray means remain advantageous with regard to this particular invention over the prior art as the consumer is allowed improved flexibility and

choice. The controlled functionality of a device which offers such control is not taught by Ronning et al. or Martens, et al.; so, one of ordinary skill in the art would have been motivated to combine this controlled functionality of an on/off switch feature with dispensing devices such as those which Ronning, et al. and Martens, et al. do teach.

Claim 25 is drawn to the aforementioned packaging means in which the top and base are capable of being maintained in an intermediate state which is between the open and closed positions.

The dual function dispenser which Furner et al. teach is one which employs a spray control button having not only open and closed positions, but also an interim position. That is, upon depression of the spray control button, the spray container dispenses product in an amount up to a calibrated volume, after which depression of the spray control button no longer dispenses product in order to waste less product and improve efficiency of the controlled dosage spraying (column 8, line 29).

Similarly, claims 34-36 are drawn to a spring which comprises the longitudinal member between the top and the base. Furner et al. do not expressly teach a spring as a dispenser, although one of ordinary skill in the art would have recognized the similarities between the function of the spray control button and spray control nozzle which Furner et al. teach and the spring controlling feature of instant claim 34. Claim 35 limits the role of the spring in the compressed state to one associated with the state of the packaging means being without an externally applied force. Similarly, Furner et al. teach the equivalent of this instantly claimed resting state; for example, the spray

control button which Furner et al. teach has a spray nozzle orifice which is aligned with the valve stem of the spray container, and the shell interlocks with the base by means of a latch opening. Upon use, as the valve stem aligns with the base latch opening, a stop means is implemented to prevent the consumer from attempting the push the base and the refill unit too far into the holder. The function and apparatus of the features which Furner et al. disclose here remain analogous to those instantly disclosed, thereby rendering the content of instant claim 35 to lack patentability over the prior art. Similarly, claim 36 shares this common control feature with the prior art. Due to these known control release valve features as disclosed by Furner et al. one of ordinary skill in the art would have been motivated to implement a spring feature in order to continue the success of controlling product dispensing; for these reasons, this implementation would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made.

Claims 41-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ronning et al. (US 4,683,132)in view of Martens, et al. (GB 2,039,740) as applied to claims 1-4 above, and further in view of Harden (US 4, 512,933).

Ronning et al. teach compositions, devices, and methods for the extended control of insect activity wherein an insect control agent is adhered to a fiber having a rough surface which preferably is comprised of cellulose or cellulose derivatives. Generally, Martens, et al. teach a vapor dispensing device for dispensing air fresheners, insecticides, and other air-treating vapors. The structure of the dispensing device which

Martens, et al. teach precedes that of the instant invention and teaches an upstanding enclosure having dispensing openings. Harden elaborates on the teachings of Ronning et al. and Martens et al. by implementing structural device details such as a detachability feature of an analogous invention which relates to and precedes those of the instant invention.

Harden teaches an apparatus for dispensing volatile substances; this apparatus comprises a frame to house a detachable and mountable replaceable substrate cartridge containing a volatile substance. It is the detachable and mountable feature which is present in addition to the core characteristics and functions of the devices which Ronning, et al. and Martens, et al. taught.

Claim 41 is drawn to the lack of detachable nature of the top or bottom sides from the longitudinal member in order to replace the substrate. Likewise, Harden teaches a frame which is adapted to detachably mount a replaceable substrate cartridge containing a volatile substance (column 8, line 54) and where no de-construction of the frame appears to be required in order to replace the substrate cartridge. Similarly, claim 42 is drawn to the removability for replacement of the substrate component of the packaging device claimed. Where the top and base are in a closed position, as suggested by the instant claim, one of ordinary skill in the art at the time the invention was made would find the removal and subsequent insertion of the substrate component to be prima facie obvious in view of the prior art as applied to claim 41, since the common feature of these two claims is the limitation of detachability. Likewise, the stability of the instantly claimed packaging means as claimed assumes the

capability storing the longitudinal member when the top and base are in a closed position, thereby rendering the content of claim 43 prima facie obvious as the content relates to the functionality and utility of the claimed packaging means.

Claims 45 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ronning et al. (US 4,683,132) in view of Martens, et al. (GB 2,039,740) and Thornton et al. (US 3,790,081) as applied to claims 1-4 and claims 19- 21, 26-33, 39, and 44 above, and Harden (US 4, 512,933).

Ronning et al. teach compositions, devices, and methods for the extended control of insect activity wherein an insect control agent is adhered to a fiber having a rough surface which preferably is comprised of cellulose or cellulose derivatives. Generally, Martens, et al. teach a vapor dispensing device for dispensing air fresheners, insecticides, and other air-treating vapors. The structure of the dispensing device which Martens, et al. teach precedes that of the instant invention and teaches an upstanding enclosure having dispensing openings. Thornton et al. elaborate on the teachings of Ronning et al. and Martens et al. by implementing structural device details that relate to and precede those of the instant invention. Finally, Harden's invention in an analogous art teaches packaging device structural features which precede those claimed instantly.

Claim 45 is drawn to a lid implement to retain the vapor active pyrethroid when the top and base are in the closed state, a feature which Ronning, et al. and Martens, et al. do not focus on in their respective disclosures. Similarly, Thornton et al. teach a device wherein at least one of the end members is slidably sealed to said body

and has apertures positioned to be adjustably closed by relative axial movement of said end member and said body (column 7, line 21). The concept which Thornton et al. claims here remains identical to that of the claim 44. Harden summarizes the prior art as teaching a supply container supported directly on a reservoir lid and comprising a structure which cooperates with the housing to facilitate the disbursement of the active agent. Therefore the concept which Harden claims precedes the instant invention, and due to the similar device functions and applications, one of ordinary skill in the art at the time of the invention would have been motivated to utilize this cap feature in order to maintain the supply of the pyrethroid active agent until disbursement is desired. In view of the prior successes with sealed containers of the active ingredient, one of ordinary skill in the art at the time of the invention would have found the instantly claimed lid feature to have been prima facie obvious.

Claim 46 and 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ronning et al. (US 4,683,132)in view of Martens, et al. (GB 2,039,740) as applied to claims 1-4 above, and further in view of Harden (US 4, 512,933) and Meetze, Jr (US 4,063,664).

Ronning et al. teach compositions, devices, and methods for the extended control of insect activity wherein an insect control agent is adhered to a fiber having a rough surface which preferably is comprised of cellulose or cellulose derivatives. Generally, Martens, et al. teach a vapor dispensing device for dispensing air fresheners, insecticides, and other air-treating vapors. The structure of the dispensing device which

Martens, et al. teach precedes that of the instant invention and teaches an upstanding enclosure having dispensing openings. Meetze, Jr. elaborate on the teachings of Ronning et al. and Martens et al. by implementing the indicator feature which relates to and precedes this feature as claimed in the instant invention.

Claim 46 limits the packaging means to one which comprises an end-of-life indicator of a specified composition, while claim 47 limits the packaging means to one in which the indicator display is a numeric or color graphic display.

Meetze, Jr. teaches a device for indicating when automatic periodic operation has emptied an aerosol container. Mechanically, the invention of Meetze, Jr. includes a feature which allows the number of valve operations to be counted as a function of product release. More specifically, an embodiment of the invention includes a counting mechanism which includes a housing unit as well as a rachet spring and gear mounted for rotation on a shaft spanning the distance between upper and lower plates. Each time the spring is deflected by movement of a dispensing lever, the ratchet gear is rotated through an angle defined by one tooth. Therefore, when the container has been operated to its maximum capacity, the counter mechanism can be used to signal that the container is empty (column 5, line 3). However, Meetze, Jr. does not express that a display indicator is present in this embodiment.

Harden teaches an apparatus for dispensing volatile substances; this apparatus comprises a frame to house a detachable and mountable replaceable substrate cartridge containing a volatile substance. Further, Harden teaches an apparatus which can include an indicator means for giving a visual indication that the

substrate has been depleted of its supply of volatile substance (column 2, line 53). Since the limitations of the instant claim, a numeric or colour graphic display, are representative visual indicators which preceded by the visual indicator which Harden teaches.

Due to the similar function of vapor delivery and the inclusion of indicator features in the prior art, one of ordinary skill in the art at the time the invention was made would have been motivated to implement this indicator feature into the vapor delivery device of the instant invention. Further, in view of the prior art, one of ordinary skill in the art would have found this implementation to have been prima facie obvious in view of the prior art.

Claim 48 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ronning et al. (US 4,683,132) in view of Martens, et al. (GB 2,039,740) as applied to claims 1-4 above, and further in view of Hayes et al. (US 5,899,382).

Ronning et al. teach compositions, devices, and methods for the extended control of insect activity wherein an insect control agent is adhered to a fiber having a rough surface which preferably is comprised of cellulose or cellulose derivatives. Generally, Martens, et al. teach a vapor dispensing device for dispensing air fresheners, insecticides, and other air-treating vapors. The structure of the dispensing device which Martens, et al. teach precedes that of the instant invention and teaches an upstanding enclosure having dispensing openings. Hayes et al. elaborate on the teachings of

Ronning et al. and Martens et al. by implementing structural device details such as a hook mounting feature which also precedes the content of the instant claim.

Hayes et al. teach a device for releasing a volatile substance into an environment where the release takes place in a controlled or metered manner. Further, a reservoir made of a substance-absorbent material which is impregnated with a volatile substance in its liquid phase is located in a cavity open at the front surface of a container body. Additionally, the device may be packaged with film such that a vapor barrier is formed in order to preserve or store the composition until the consumer opens or activates the package. Upon absorption of the composition, the composition is introduced to ambient air, volatilized, released, and dispersed throughout an environment (abstract).

Claim 48 is drawn to the attachment of a hook feature to be added to the packaging means device in order to facilitate surface mounting of the packaging device. More specifically, Hayes et al. teach a mounting feature co-existent with a fishhook-shaped clip for securing the device on the area of a wood-type panel (column 6, line 40). Due to the various structural and functional similarities between the teaching of Hayes et al. and the instant invention, one of ordinary skill in the art would have been motivated to implement the successful feature which is the hook feature into a similar composition and delivery device. Given the particularly specific hook precedent which Hayes et al. demonstrate, one of ordinary skill in the art at the time the invention was made would have found the hook feature of the instant invention to have been prima facie obvious.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., In re Berg, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); In re Goodman, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); In re Longi, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); In re Van Omum, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); In re Vogel, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and In re Thorington, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1 and 5-18 provisionally are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1,6-11, 41,42, and 49 of copending Application No. 10578282 (Balakrishnan et al,, 'copending').

Although the conflicting claims are not identical, they are not patentably distinct from each other because both inventions are drawn to a cellulosic based substrate or matrix for controlling flying insects. Further, the specific features of this cellulosic based substrate or matrix are directly related to the same invention as addressed below and in regard to claims 1 and 5-18.

This is a provisional obviousness-type double patenting rejection because the copending claims have not in fact been patented.

The body of the instant invention is drawn to a packaging means for

retaining and releasing at least one vapor active pyrethroid compostion where the container comprises a holder and a cellulosic substrate, among other structural and functional limitations. The features of instant claims 5-11 are included in copending Application No. 11578282 in claim 1 where the determination of the height limitations of each of instant claims 5-8 are presumed obvious in view of the intended function of the packaging means. Claim 1 of the copending application outlines a cellulosic based substrate or matrix for controlling flying insects in which the cellulosic based substrate or matrix has a surface area in the range of 50-5000 cm2. The inventive concept of the composition of the cellulosic based substrate which is a component of the packaging means of the instant invention remains the feature of the copending application. The copending application further limits the composition by necessitating the inclusion of a carrier solvent, particular pyrethroid agents rather than the general class of pyrethroids claimed in the instant invention, as well as temperature and dispersal rate limitations.

Claims 9 and 11 of the instant invention are drawn to the grams per meter of the cellulosic substrate, whereby these exact quantitative limitations are disclosed in respective claims 41 and 42 of the copending application. The range included in claim 10 of the instant invention is included also in the range disclosed in claim 41 of the copending application, without further explanation rendering this range of values to be prima facie obvious.

Claims 12-18 of the instant invention are drawn to the quantitative amount of vapor active pyrethroid presence in the cellulosic based substrate per unit area. Likewise, Claims 49 and 6-11 of the copending application respectively disclose these

quantitative ranges of pyrethroid.

One skilled in the art at the time of the invention would have been motivated to combine the above features in order to create a cellulosic material containing a pyrethroid active ingredient according to the claims addressed. Furthermore, one reasonably would expect success from such a combination of features as those indicated from the comparison of the instant invention and the copending application.

Response to Arguments

Applicants' arguments presented 10/14/2009 have been fully considered but are not persuasive. Applicants' arguments regarding the rejection of claims 1-4 under 35 U.S.C 103(a) as being unpatentable over Ronning et al. in view of Martens et al. are summarized and addressed below. It is noted that Applicants have not addressed the rejections of any of dependent claims 5-48, and therefore these rejections are maintained as outlined above.

Applicants' arguments traversing the Double Patenting rejection have been fully considered but are not convincing since the co-pending claims are obvious over those instantly claimed. Both sets of claims are drawn to the same cellulosic substrate of a specified configuration for the distribution of a vapor active. The difference is that the instant claims further require a delivery holder for the vapor active's substrate. However, it would have been obvious to the skilled artisan at the time the invention was made to utilize a holder, and it is recognized that a packaging means for retaining and

releasing a vapor active composition is inseparable from the contained vapor active agent itself. Therefore, the rejection is maintained at this time as Applicants wish to defer the filing of a Terminal Disclaimer as stated in the remarks of 10/14/2009.

Applicants traverse the rejection of claims 1-4 under 35 U.S.C. 103(a) over Ronning et al. in view of Martens et al. foremost on the grounds that Martens does not teach the recited packaging structure of claim 1. More specifically, Applicants state that Martens does not teach or suggest a honeycomb-configured substrate that attaches to a top and a bottom of the carrier structure. Further, Applicants state that while Martens discloses a carrier structure that can include a honeycomb configuration that there is no teaching or suggestion that the enclosure 12 can be of a honeycomb configuration.

Finally, Applicants take the position that Martens teaches away from the instantly claimed configuration since Martens teaches that the vaporizable composition is provided on the “holder” 56 rather than the enclosure 12. Applicants’ position is that instant claim 1 requires the vaporizable composition to be provided on the enclosure 12. Applicant asserts that Martens teaches away from the vapor composition on enclosure 12 since Martens teaches that the vapor composition must be shielded from air flow to slow vaporization.

Applicants' attention respectfully is directed to Martens which reads as follows, "A great variety of other shapes and arrangements of materials may be used to form the structural means disposed *within* enclosure 12. Convoluted rolls of corrugated cardboard, honeycomb configurations criss-cross configurations and V-shaped configurations are a few examples," (*emphasis* added) (see page 4, column 1, lines 19-

23). Therefore, Martens suggests that the honeycomb configuration, the carrier of the vaporizable active agent (as illustrated in Figure 6 or the alternate embodiment of Figure 5) is fitted inside the enclosing holder as illustrated, for example, in Figure 1. From this description of Martens, the skilled artisan would have immediately envisaged the carrier structure fitting inside the holder (Figure 1) while touching on two sides (i.e., a "top" and a "bottom"). In view of the embodiment illustrated by Figure 5, and in view of Martens' suggestion to implement shapes such as a honeycomb configuration in order to serve the purposes of reinforcing dimensional stability between opposed walls, defining air flow channels, and releasably carrying the vaporizable composition (see page 4, column 1, lines 24-31), the relevance of the Martens reference as it reads on the packaging means of the instant invention is maintained. Finally, it is noted that all disclosures "including unpreferred embodiments" must be considered. In re Lamberti 192 USPQ 278, 280 (CCPA 1976) citing In re Mills 176 USPQ 196 (CCPA 1972). Therefore, it would have been obvious to one of ordinary skill in the art to utilize a honeycomb configured insert into honeycomb carrier structure insert into a holder device imparting reinforcing dimensional stability given that Martens teaches these components in a vapor release device.

In response to Applicants' arguments that Martens teaches away from the embodiment components on which the instant claims read, the Examiner directs applicants' attention to MPEP 2123. MPEP 2123 (II) addresses the validity of a rejection over the prior art's broad disclosure instead of preferred embodiments as follows:

> "[t]he prior art's mere disclosure of more than one alternative does not constitute a teaching away from any of these alternatives because such disclosure does not criticize, discredit, or otherwise discourage the solution claimed…." *In re Fulton*, 391 F.3d 1195, 1201, 73 USPQ2d 1141, 1146 (Fed. Cir. 2004).

Thus, it remains the Examiner's position that Martens does not teach away but rather encourages the structural means as instantly claimed. For these reasons, the rejection of claims 1-4 over Ronning et al. in view of Martens et al. is maintained.

Conclusion

No claims are allowed.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to AUDREA J. BUCKLEY whose telephone number is (571)270-1336. The examiner can normally be reached on Monday-Thursday 7:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sharmila Landau can be reached on (571) 272-0614. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/AJB/

/David J Blanchard/
Primary Examiner, Art Unit 1643